

REMARKS

In accordance with the foregoing, claims 12, 13, 20, 21, 27, and 28 have been amended, claims 14, 18, 19, 22-26, and 29-41 have been cancelled without prejudice or disclaimer, and claims 35-37 have been added. No new matter has been entered. Therefore, claims 12, 13, 15-17, 20, 21, 27, 28, 35, and 36 are pending and reconsideration is respectfully requested.

DOUBLE PATENTING:

Claims 27 and 28 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18 and 28 of copending Application No. 10/737,837. However, in view of the present amendments, these rejections are believed to be overcome. As such, applicants respectfully request that the double patenting rejections be withdrawn.

REJECTIONS UNDER 35 U.S.C. §102:

Claims 12, 17, 18, 27, 33, and 34 are rejected under 35 U.S.C. §102(e) as being anticipated by Watanabe (U.S. Patent 6,492,058). These rejections are overcome.

Regarding the rejection of claim 12, briefly, it is noted that claim 12 recites a lithium battery comprising a generation element which generates electrical power, a can to house the generation element, the can including first and second surfaces, the first surface including a first terminal electrically connected to the generation element and the second surface including a second terminal electrically connected to the generation element, an output lead made of a first material or an alloy thereof electrically coupled to the second terminal, a safety device electrically coupled to the output lead to interrupt current to the output lead with an increase in a resistance thereof upon a temperature and/or a voltage increase in the can, and a first lead to electrically couple the first terminal to the safety device. According to the claim, the first lead has a layer made of the first material or an alloy thereof and a cladding layer made of a second material or an alloy thereof.

Calling attention to the recited structures of the output lead and the first lead (i.e., the output lead being the first material or an alloy thereof, and the first lead being made of a layer of the first material or an alloy thereof and a cladding layer being made of a second material or an alloy thereof), applicants submit that, when examined together, the leads form a unique multi-level structure.

In contrast, it is noted that the reference to Watanabe is being cited for the purpose of providing a PTC safety device between terminals. According to the reference, lead material 10 is connected to the one-package unit 9, which is connected to the positive side battery electrode terminal 4, a PTC device 13, and the negative side battery electrode terminal 4. *See Watanabe at column 8, lines 39-45.* In other words, the reference indicates that lead material is connected to both sides of the PTC device 13. That said, the reference is silent as to the structure of the lead material. Further, the reference certainly does not disclose that the lead material 10 on one side of the PTC device 13 includes a particular material or material alloy with the lead material 10 on the other side of the PTC device 13 including a layer of the particular material or material alloy and a cladding layer of another particular material or material alloy.

Thus, applicants assert that claim 12 is patentably distinguished from the reference to Watanabe and that, therefore, the rejection of claim 12 is overcome.

Regarding the rejections of claims 17 and 27, it is noted that these claims depend from claim 12 and that, therefore, the rejections of these claims are also overcome for at least the reasons set forth above.

As a preliminary matter, it is further noted that claim 12 is patentably distinguished from any combinations of the references cited by the examiner. For example, to cure at least some of the apparent defects of Watanabe, the Examiner has relied upon the teachings of Morishita. Morishita discloses a cell having an outer can and a lead plate for current utilization. As shown in FIG. 4 of Morishita, the lead plate may have a two layered cladding. However, as shown in FIG. 4 and FIG. 5, the lead plate having two layer cladding of Morishita is not disclosed as connecting a PTC device between the terminals of the cell, or as being separable into two parts, as in the claimed invention (e.g., the output lead and the first lead). *See Morishita at column 5, lines 21-38 and FIGs. 4 and 5.* Nevertheless, according to the Examiner, since Morishita teaches the use of first and second materials as leads, it would have been obvious to pick lead materials based on the use in the battery and the style of welding needed. Therefore, it would have been obvious to modify the lithium battery of Watanabe with the battery casing and lead material of Morishita to understand what materials should be used for the lead in the production of the lithium battery with a protective device.

Applicants disagree with this reasoning. The structural differences between the claimed invention and both of the references are so significant that any modification of Watanabe inspired by the teachings of Morishita would be of little help in achieving the claimed invention. In particular, since Watanabe fails to disclose a difference between the lead material 10 on either side of the PTC device 13 and since Morishita simply discloses a single piece lead plate (albeit,

one that has two layers), at best, a combination of Watanabe and Morishita may include the lead material 10 of Watanabe being formed with two layers as in the lead plate of Morishita on both sides of the PTCE device 13. This is, of course, in contrast to the claimed unique multi-level structure, in which the output lead and the first lead have different structural characteristics.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 13, 14 and 19-26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Watanabe (U.S. Patent 6,492,058) in view of Morishita (US Patent 5,976,729) and as evidenced by Pedicini (US Patent 5,188,909). However, since these claims depend from claim 12, which is allowable as discussed above, and since the additional references to Morishita and Pedicini fail to cure the defects of Watanabe, applicants respectfully assert that the rejections of these claims are overcome for at least the reasons set forth above.

ADDED CLAIMS 35-37:

Applicants note that claims 35-37 have been added and are believed to be allowable based on their dependence upon claim 12, which is allowable as discussed above.

CONCLUSION:


There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited. If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Finally, if there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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Date: 7/7/06

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